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AGRICULTURAL.

Orchard Culture.

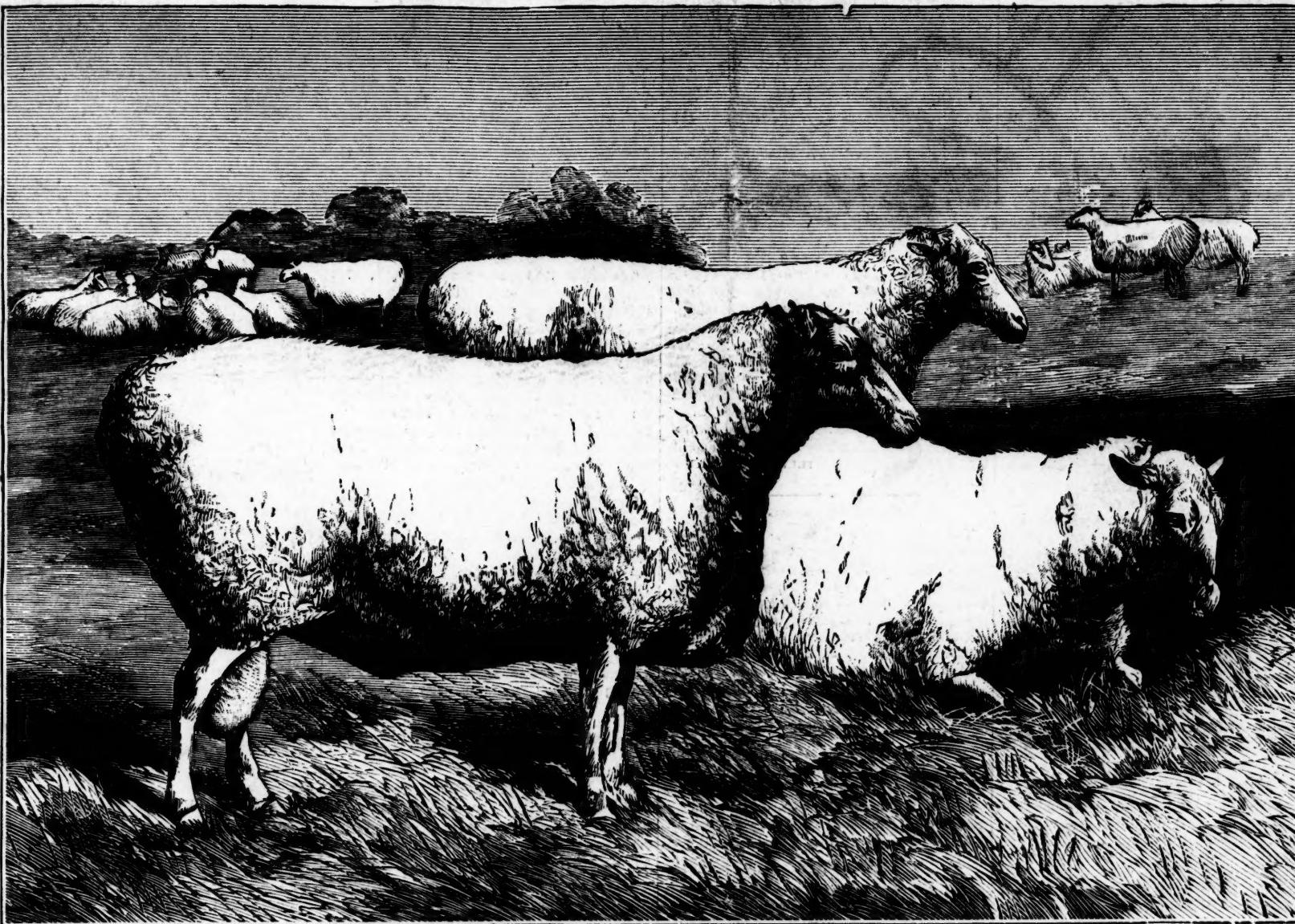
A large apple crop such as we have this year always encourages the planting of more orchards, and we suppose this year will be no exception. In setting an orchard a man has many years to wait before he can receive any return from his investment, and during all those years he should give good cultivation, fertilization and care in the way of pruning or training, which is the better work, because it expresses the better way. When this has been done properly, and the trees begin bearing, he has an investment which will give good returns for many years if the care is kept up. It is then false economy to take any chances in the start by purchasing cheap trees, or by carelessness in preparing the ground for them. Thoroughly decide on the varieties to be set, selecting such as are adapted to the soil and climate from among those that are in demand in the market. Buy only of a reliable party, who can be depended upon to furnish healthy, vigorous trees, true to name, and see that they are taken up with care. To obtain such it may be necessary to pay a little more than some would sell for, but scrub stock in an orchard is as bad as elsewhere on the farm.

Do not commit the mistake of making the land too rich, or of putting manure into the hole before setting the tree, but have the land in good condition, say as good as for a corn crop. Give it good cultivation while the trees are growing, avoiding the small grain crop, but growing corn, beans or peas, roots, tomatoes or squashes between the rows to get some pay for the use of the land, and for the labor of working it each year. It is easy from the above list to make a rotation that would last until the trees well filled the ground, or if it does not there are others, like small fruits, which might be added, or even a crop of chickens. The fertilizer used for these head crops would feed the trees also, and it would be placed just where the trees needed it, beyond the extremity of the branches, to tempt the feeding roots to extend out after their food. Whatever crop may be chosen do not crowd the trees with it. While the ground will need working clear to the trunk of the tree, it is better that there should be space enough to work there after the crop has grown too large to cultivate among. He who does this will probably guard against borers and other insect pests, and will have an orchard that will give both pleasure and profit.

Dairy Notes.

The instructor in butter making at the Ontario Agricultural College says that as an average, on 36 farms where the skim milk was tested for butter fat, the separator saved one pound of butter per cow each week over the gravity methods of setting, or 40 pounds, worth \$6 in the season of 40 weeks. A herd of 10 cows would yield \$60 more in that time if the separator was used, which would soon repay its cost, besides the advantage of less labor in caring for it, and that, even greater, of having the skim milk perfectly fresh for feeding to calves and pigs. And if the cream is taken to a creamery, there is a lighter load in going and no load returning.

The advantage of the system of cold storage which takes the surplus of our butter at the time when the most is being sent to market, and thus prevents overstocking and a breakdown in price, can be readily seen by most butter makers, but the consumer does not always see that it is a benefit to him. He feels it a hardship that he cannot buy his butter in June when the quality is the best in the season, at any price he may be willing to pay. He declares that the maker and the storage man are combined to keep the prices up by removing the surplus from the open market, while he fails to remember that because of this same storage he can get his June-made butter next winter in as good condition as when it first came to market, and at about the same price, while without it he would have then to



LESTER BREED OF SHEEP.

selected summer butter that had grown mold, or winter butter of very inferior quality at almost any price the dealers chose to ask. Cold storage has increased the market value of winter butter by compelling the dairymen to try by good feeding and the best methods of handling to produce (then a grade of butter that will compete successfully with the storage butter made in June. We can well remember when a large part of the winter made butter from cows fed on salt hay, bog hay or late hay cured on the stump and no grain was as white as lard, and rather inferior to lard in flavor, as it acquired from filthy stables, from kitchen, washroom and pantry or from an ill-ventilated cellar of vegetables, many odors and flavors that good lard was free from.

Butter makers should remember if they make butter next winter that the feeding of cottonseed meal makes butter harder, with a high melting point, above 100° with most cows, and it is used liberally by some. Substitute either gluten or linseed meal, and do not use over five pounds daily for a large cow, with at least twice as much other grain, and we would prefer not to have over one-fourth of the grain given to be of these two feeds or of cottonseed meal, which we think would be at the least weight, and that the time of marketing would not be every day or at any time when the butter is to be packed. Butter, cheese, wool, salt pork, bacon and ham, eggs and dressed poultry find a market any day in the week, and so do apples and potatoes.

Bee Notes.

A writer in Gleanings says that he has found by experience that giving solid comb from a colony that has died to a young swarm is the worst use he can put them to. Many a time he has divided swarms into halves full of comb and they would leave, and when the queen was eaged they preferred to go back to the parent colony without her than to stay there. He would prefer to put such old combs through a cleaning process on top of a strong colony, and allow them to store honey in them, the more the better, than give them combs of honey to the young swarm. He says the amount of section honey they will store under such conditions will astonish the owner.

A California correspondent of the New York Sun credits bees with having the power to foretell rain, saying that sometimes they will all cease working and return to the hive when perhaps there is not a cloud in sight or any moisture apparent in the air, and when they do so heavy rain may be expected soon. On the contrary if they go busily about their work in a cloudy morning, may be a sign that no rain will result. We had not noticed this, but there seems to be an instinct in animals and insects that enables them to foresee a coming storm quite as accurately as the weather bureau.

Feeding Cows.

Among the agricultural papers I read I think yours take the lead, and afford me the greatest satisfaction. Especially I like the attractive and thorough manner in which you report the markets, while the articles from your correspondents are practical and instructive. I agree in the main with what Mr. George E. Newell writes about feeding cows, but take exception when he says that it is best not to feed them

when the milking is in progress.

My experience has been that, when cows have a short pasture, so that I have to feed them at the barn, more or less, the year around, that when they give down their milk butter is pretty poor business. He acknowledges that in the general market creamery butter is quoted higher than dairy butter, but a large per cent. of dairy butter is sold to private customers at a better price than creamery butter, and he thinks three-fourths of the private families in Grand Rapids use dairy butter, and most of them do so because they prefer it to creamery butter. We are glad there is one who thinks that private dairies can compete successfully with the creameries, for we have feared that the creameries were getting into such favor that dairymen might think a farm was of no use unless near a creamery, cheese factory, condensary or milk route, while we feel sure that a young, healthy and industrious couple who had a good knowledge of dairying and other branches of farming, (especially the raising of young stock, pigs and poultry, could make a good living on a good farm if they were not within 20 miles of either of those conveniences, or even within 20 miles of railroad. The secret would be to reduce all crops into such shape that the most value could be got at the least weight, and that the time of marketing would not be every day or at any time when the butter is to be packed. Butter, cheese, wool, salt pork, bacon and ham, eggs and dressed poultry find a market any day in the week, and so do apples and potatoes.

Farm Hints for October.

While it is used to be the custom to hush the corn and dig the potatoes so late that fingers suffered with the cold, very few now postpone either to so late a date now. We should cut corn as Western farmers do their wheat before it was fully ripe, and let it ripen in the shock. If there is any loss in the grain, there is a saving in the feeder. After the husking, see that the stover is well put up, so that shocks will not fall down or be blown down, and let it get well dried before putting into the mows. Those who have silos may think it better to pluck off the best ears for husking and make silage from the rest or to make silage of it all. We would prefer to hush all that we thought worth the labor.

ROOT CROPS.

Nearly all the root crops are to be dug this month. Beets and mangolds need to be well dried off before packing away, and they should be put in a cool place where the sun and wind cannot reach them to wither them. We consider this to be as important when they are intended for stock feeding as when meant for market, for we think a withered beet has lost something of its digestibility if it has not lost any nutritive quality. They also should not be bruised in handling, as they soon start to decay. Carrots some here, and while they keep in better condition than beets through the winter, they are best kept in about the same way.

Potatoes are in most cases to be dug now, as the tops seem to have died down early, and we think the sooner they are out of the ground after the tops are dead the better. A heavy rain may start a new growth on some, but it will not increase the crop and will injure the quality. Let them get well dry, but not sunburned or wind burned before picking them up. Try the plan of saving seed from the most prolific hills, which we think is more important than the selection of large tubers. In fact we prefer the medium or egg size for seed to the larger ones. Burn all potato tops as soon as dry enough. The heat of any fertilizing property by burning is small, and more than balanced by the gain of destruction of fungus and insect pests.

If winter cabbages are growing so rapidly as to begin cracking, tip them over toward the north, lifting a part of the roots out of the soil. This will check the growth, while they will keep better there for a month longer than in the cellar or shed.

GATHERING FRUIT.

This month the apples and pears should be harvested, and the work cannot be too carefully done. The heavy wind which brought so much fruit to the ground a few weeks ago has loosened the labor of harvesting the crop, and it is likely to keep price low on all fruit that is not sound and unbruised for some weeks yet, but it will make smaller supply later on, and we shall expect

to see higher prices for the best grades as soon as these disappear.

Handle such fruit as carefully as if they were eggs, and assort them so that but one kind and one size will go in a barrel, then pack so that the barrels may be moved without the fruit rattling inside, and keep them cool. Never pack fruit when it is damp from dew or other cause. We like to let it lie a few days after picking, both to dry down the stem and to color up a little more if it needs it, and while we notice that some writers say they prefer to do by feeding them either grain or hay during the milking process.

Norwell, Mass. HENRY A. TURNER.

BANKING CELERY.

While the early varieties of celery may be blanched by setting boards snugly against the rows, or by the use of straw or leaves, the later or winter celery is best blanched by the old method of handling or drawing the stalks closely together and placing earth around them, preventing the process as the stalks grow out. With one banking now and another next month it may be made ready for the Thanksgiving market. If intended for a later market it will need one banking next month, the process to be finished in the pit during the winter. Never handle or bank celery when it is wet, as this causes rapid decay.

FALL MARSHING.

The last of this month is not too early to put manure upon rhubarb and asparagus beds, or around grape vines, currant, blackberry and raspberry bushes. That is, it is not too early if the leaves have fallen off, which shows when the growth has stopped for this season. But before any manure is put on, prune all that is needed, cutting away dead and superfluous wood, and burning everything cut off, and also all weeds, mulch and leaves. We believe in purification by fire to destroy disease germs and insects. We wish we could persuade all our readers to try one method of final manuring; to sow winter rye on all bare ground that is to be plowed next spring. Sow early that it may make a good stand, and it will keep the land warm, and it will be ready to work earlier next spring. As to fall topdressing of grass, do it any time after the frost kills the grass, or as soon after as it may be thought that the manure will not produce too heavy a later growth. We have found such a time in October, or it may be necessary to wait until next month for it.

CARE OF FARM STOCK.

The cattle need but little especial care this month, excepting to push along those that are fattening as rapidly as possible, and do not keep young stock or milk cows out of doors in cold storms or frosty nights, or make the mistake of trying to have them get their living in the fields after the grass has become so dry or frost bitten as to have no nutrition in it. Make all changes in feeding gradually, from pasture to dry feed, and all increases in amount or all improvement in quality to fattening stock. We have felt that we could make more pounds of grain in a week at less cost, on both cattle and hogs, from the middle of October to the last of November than at any other season of the year, though we liked what we called well finished. When we had fat hogs to sell we usually found a better price as soon as they were well fatted than if we kept them longer.

Thomas W. Lawson turned the winnings

of the Bonsai, which amounted to \$2000, in the Transylvanian stakes at Lexington, over to the Kentucky Trotting Horse Breeders' Association, to be donated to some worthy charitable organization in Lexington.

FARM POULTRY.

Such poultry as are to be made ready for Thanksgiving markets should be fed liberally this month, but not kept confined any more than they have been until a week or ten days before killing, when they should be in small yards. We never believed in cooping and stuffing, for those who are not experts at it at least. Make the house snug, against draughts through it, and see that doors and windows are in proper condition for winter, but there will probably not be a night or but few this month that they should be kept closed. Yet it is better to begin to teach them to seek shelter in the house every night early enough so that they will not be hard to get inside, as the time will soon be here when all must be sheltered from wind and storm.

The Breed That Pays.

The only breed of animals that pays is the one that is selected carefully for the peculiar qualities which are desirable, and which they can transmit to their offspring, if we can select such parents it matters little from what breed they come. Individual qualities count for more than breed in this respect. The worn-out, fag-end animals of some good breed of sheep, cattle or swine will not transmit as good qualities to their young as some strong, vigorous, robust worthy couple that may not have good ancestry, but an excellent record themselves. They will come pretty near laying the foundation for a new strain that will become famous for their qualities.

Not sufficient attention is paid to the individual qualities of breeding stock as a rule. There is the fear of losing the distinctive traits of the breed, and so no animal except the pure-bred stock is selected. If one is anxious to keep only pure-bred stock on the farm, this, of course, is all right, and even necessary, but the farmer breeding for individual quality and profit cannot always do this. He has stock which has performed good services for him, and he does not want to stop breeding them because they may be only half or one-quarter blood. From these latter we sometimes get our finest type of sheep.

A thoroughbred ram is considered essential for the breeding of lambs that will keep up the quality of the flock, and this is emphasized particularly because the ram decides the character of the lambs more than the ewe. Consequently we need to be careful of the ram. Select not only good breed, but a good individual. If a young, immature ram is selected the lambs will show an early maturity, and they can be bred much earlier than if the ram first used was an old one. This principle must be followed where one is breeding for early maturity. The old ram, however, will produce just as good offspring in every other way, and where early maturity is not desired the old ram has a slight advantage over the very young, immature one. Successful breeders use both young and old, and the point is not so much in the age of the ram as in his quality, strength, vigor and record. One fine ram might easily add a pound to the fleece of the flock, and if he will do this it will pay to spend time and money in selecting him.

Breeding from such animals is always satisfactory, and the returns are proportionately greater than the outlay.

Minneapolis. A. B. BARRETT.

Some Apple Notes.

From most parts of the country come the reports that the apple crop on the whole will be larger this season than ever before, and the danger now confronting farmers is the inevitable consequences of a big crop. The tendency will be for low prices. Some farmers will rush their apples to market as soon as possible and flood the merchants, who must work them off at a discount. In this way early low prices are established, and it may be that they will not recover until late in winter. There is no reason for doing such a foolish thing, for great as the supply is, the market is greater. While the crop promises to be the greatest on record, the consumptive demand also promises to be beyond all precedent. It should be remembered that we have opened up new markets abroad for our apples, and the countries south of us are beginning to eat our famous winter fruit. Then factories annually consume millions of pounds of apples for jellies, canning and preserves. All these combined will this year take care of the surplus apples if they are marketed with wisdom.

There is first the necessity of studying the foreign demand. Europe will take our apples freely at prices that will pay well, but they must be selected with care and carefully packed. The farmer who will select the best keeping and best selling apples, dry them thoroughly, pack them for long shipment, and send them to responsible exporters will make money. Nine-tenths of the apples received at shipping points have to be repacked, and defective fruit taken out. The farmer pays for this extra labor in his diminished returns. There is no reason why the apples should not be packed properly at home, so that they could go straight to the steamer, and when unloaded in London they would be in good marketable condition. A fact worth remembering is that Canadian growers do this work better than Americans. This is not due to patriotism, but simply to superior handling of the fruit. Canadian apples are no better than ours, nor as good as many of our choice varieties, but if foreigners only get our second-rate fruit, we cannot blame them for thinking otherwise. JAMES S. LEWIS.

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AGRICULTURAL.

Practical Pig Pointers.

Every swine breeder should have ample pasture for the pigs, with abundant clean water.

Salt and ashes aid digestion in swine.

Cholera will be prevented if sulphur be mixed with the salt and ashes. The sulphur may be mixed with slop also.

Like rarely infest hogs that have plenty of sulphur.

A clean feeding place for swine is a prime necessity.

Hot, dry, dusty sheds in warm weather will insure cholera in the swine.

All sleeping places of swine should be cleaned often and thoroughly, especially in the hot weather.

Rusty or straw is one of the very worst materials for bedding for swine.

Green corn fed to hogs will cause them to have worms.

Every hog showing any sign of sickness should be at once taken out of the herd and isolated for treatment.

Cholera in the herd travels swiftly from animal to another.

When a pig refuses to eat and thumps has his hair turned the wrong way, trot him out and give him a dose of axe. Make the dose a big one.

List the pigs for their feed occasionally, just to put an edge on their appetite. As soon as they squeal for something to eat let them have it.

The healthy hog's stomach is as regular as clockwork in demanding food.

When feeding for fattening always watch for signs of indigestion. Obey the first sign by reducing rations.

Remember that stuffing and cramming and jamming food into a pig to fatten it in a short time is a wholly abnormal, unnatural performance. We must expect it to wreck some of the forced animals.

Large herds in small quarters are liable to disease.

Sour swill prepares the pigs for infection with the cholera germ.

Oats, corn, grass, milk, unsupped kitchen slops, salt, wood ashes and sulphur are the main elements in diet to keep hogs healthy.

Spilled grain in the sheep is dangerous food for swine.

Cholera germs remain in the soil for years. Never put swine on land where other swine have died of the disease.

Fall outbreak of the hog cholera do not spread so fast or so far as earlier outbreaks.

Most of the so-called cures for hog cholera will, on trial, prove worthless.

Don't let dogs eat swine that have died of cholera or other germ diseases. Dogs thus fed roam over the neighborhood, and by means of their droppings, may infect every herd whose grounds they visit.

The spray pump and disinfectants should be used freely around the pigeons.

The pig's first year is his time of greatest liability to cholera.

Healthy and vigorous pigs are the only ones that have any chance to withstand cholera infection.

Early spring pigs are often chilled to death. Early fall pigs are often weakened by very warm weather.

All slops should be fed in clean troughs. The wood of troughs becomes impregnated with particles of food that sour and become poisons.

With corn fed in a dry and dusty pen, and with drinking water from foul, stagnant pools the herd is doomed to cholera.

Salt assists in the digestion and assimilation of grass and corn.

Ashes are germinal in the feed of swine.

Charcoal fed to pigs keeps their stomachs free from over-acidity, insuring thorough digestion.

Charred corn cobs wet thoroughly are relished by swine and are conducive to health.—New York Farmer.

Bees and Honey.

If one could buy queens from those who make it a point to grow queens and drones only in the most productive and best-tempered colonies it would usually pay to buy them every year for the colonies that have not done well, and for all colonies where the queens are known to be two years old or more. But many are careless about breeding queens even when they raise them on purpose to sell, and take their queen cells from such colonies as chance to build the most of them, and not unfrequently that is the very one they should not be taken from.

The colony that has a poor queen, or one that is nearly superannuated by old age, will usually start out to raise a new queen or several of them, and to accept such queens as not to breed from the best. Remember that the queen is the parent of the whole colony, and to her influence is principally due whatever of good or bad qualities may show in the entire colony. We think the drones also exert an influence, but the colony that is storing up lots of surplus honey will let the drones live, while an unprofitable colony are more apt to think they cannot support drones. A queen costs but little compared to the value of the whole colony, and with the improved methods one may introduce a new queen without much chance of loss.

But the queen breeder should keep a record of the colonies from which his queens are taken, and almost any one would be willing to pay more for a queen from a colony that stored 75 to 100 pounds of surplus honey than for one from a colony with a poor record or none at all.

If we were trying to produce comb-honey we would not be without the bee escape if its price were much greater than it is now. It is so little trouble to put it in its place, and then in the morning to lift off the super and find the sections all free from bees. No stopping to brush them off, no getting stung by them, and no carrying them away in the super. We have seen it advised to make a sort of tent of mosquito netting in which to put the super, leaving a hole at the top through which they would fly out, but we do not think we should like that as well. A man could put twenty bee escapes in place while he was fixing one such tent, and closing it up around the super so that no robber bees could get in.

What is known as travel-stained honey may not always be caused by the travel of the bees over the comb. Sometimes it may be the result of working on flowers which have a dark-colored pollen, and sometimes by their using particles of old comb to make new, says Mrs. Brown in the North-western Agriculturalist.

The longer honey remains on the hive, the thicker and richer it becomes, and the longer the comb is left, the longer it gets.

Hood's Sarsaparilla made me warm. It is the right thing in the right place." Hattie J. Taylor, Woodstock, N. J.

apt to be small, weak colonies, and we have heard men say that they required more fussing over to give brood comb and to feed them before winter, and perhaps in the spring again to start them to raising brood, than they were worth. Yet that is just the kind of work that pays in beekeeping as in almost everything else. To take that which is almost worthless, and make it valuable, leaves the results an almost clear profit. With frame hives and proper apparatus for handling them, there is but little labor involved in giving brood comb or in feeding, but if one does not like this way, two late swarms may be united to make one large colony, and if they fail so that they will have stores to carry them through the winter they will be as good as any in the spring.

One indication of a poor queen or one too old may often be found in the number of drones in or about the hive. Nearly all queens will produce some drones if allowed to have drone comb, but some will lay in worker cells and produce drones there. Such worker cells with drone brood may be detected by the raised appearance of the caps, which look entirely different from the flat capping over the worker brood. But when there is no queen and there are laying workers they usually build drone comb and there may be from one to a dozen eggs in each cell.

If the trouble seems to be simply that the queen is too old, or has not been fertilized, or if she is one that produces too many drones, destroy her at once, and either give a new queen or a comb of brood, from which they may raise one. Experienced beekeepers raise queens so easily and sell them so cheaply that it is better to buy of them than to begin with the brood comb. But when there is no queen and workers have begun laying in the cells, it is better to take out all the comb and cut out every drone cell and every one with the raised caps, and give the comb to other colonies. The loss of the colony is not much, as the bees are old and comparatively of no value, and it would soon die out, while the combs may be of value to the other colonies.

The number of drones usually raised by one good colony is enough for an apiary of 50 colonies; we would try to discourage drones in any but the best colonies, and if they are given full sheets of worker foundation this will do much to prevent it.

William Conway.

Indians.

Butter Market.

The butter market has been dull thus far this week, and almost without change in price. The receipts are nearly up to the usual amount for the time of year, being very nearly equal to the demand for home consumption. There is a good demand for extra Northern creamery at 25 cents to one-half pound.

The exports included 3,644 barrels from Boston, 947 barrels from New York and 912 barrels from Montreal. For the same week last year the apple shipments were 48,216 barrels. The total apple shipments since the opening of the season have been 96,809 barrels; same time last year 142,573 barrels. In detail the shipments have been 10,065 barrels from Boston, 41,228 barrels from New York, 23,896 barrels from Montreal and 21,630 barrels from Halifax.

Cable advices from Messrs. J. C. Houghton & Co., Liverpool, report sales on Monday of Baldwins at \$2.67 to \$3.90, Greenings \$3.85, Spy's \$3.15, Messrs. James Lindsay & Son, Edinburgh and Glasgow report quick market. Baldwins \$3.40 to \$3.90, Spy's \$3.90 to \$4.15, Kings \$4.85 to \$5.90, Greenings \$1.90 to \$3.40, Snow \$3.64 to \$3.90 and others \$2.90 to \$3.90. They say: "It begins to look as though there is some hope of better returns, especially for good quality."

Boston Fish Market.

There is a fair supply of fresh fish on the market, with prices a little lower. Market cod is selling at 3 to 3½ cents, large at 3½ to 4 cents and steak at 4½ to 5 cents. Shore haddock is bringing 4½ to 5 cents, small hake 2 to 2½ cents and large or medium at 2½ to 3 cents. Cod at 2½ to 3 cents, soup at 5 to 6 cents, weak fish at 6 to 7 cents and butterfish steady at 9 to 10 cents. There is a good supply of bluefish at 9 to 10 cents for large and 7 to 8 cents for small. Halibut is still short at 16 to 17 cents for white and 13 to 15 cents for gray. Eastern frozen salmon is steady at 20 to 22 cents, while swordfish is very scarce. Mackerel are not so plenty at 20 to 22 cents for large and 12 to 13 cents for medium. Oysters are still quiet at \$1 for Norfolk standards, \$1.25 for Providence Rivers and fresh-opened Stamford. In the shell Blue Points at \$2.75 a bushel, or \$7.50 a barrel. Seals are scarce at \$1.35 a gallon. Clams bring 50 cents a gallon, or \$2.75 to \$3 a barrel in the shell. Lobsters are steady at 16 cents live and 18 cents boiled.

Boston Exports and Imports.

The exports from Boston for the week ending Sept. 28 were valued at \$3,081,247 and the imports at \$1,010,246. Excess of exports \$2,071,001. For corresponding week last year exports were \$2,016,571, and imports were \$1,273,852. Excess of exports \$742,719. Since Jan. 1 exports have been \$85,006,110, and imports have been \$85,406,316. Excess of exports \$29,899,794. For the same 39 weeks last year exports were \$95,715,155 and imports were \$47,074,107. Excess of exports \$48,644,048. The principal articles of export were provisions, \$1,000,203, breadstuffs \$716,680, live animals \$280,430, leather and manufactures of same \$123,528, cotton \$381,073, cotton manufactures \$46,962, iron and manufactures of same \$72,083, machinery \$61,238 wood and manufactures of same \$53,077, paper \$22,300, tallow \$15,837, drugs and chemicals \$30,078, sugar and molasses \$17,914, spirits \$15,157, blacking \$719, books \$5005, fruits \$3657, hardware \$894.

Massachusetts Crop Report.

The State Board of Agriculture, J. W. Stockwell, secretary, issues the following summary of crop conditions in Massachusetts:

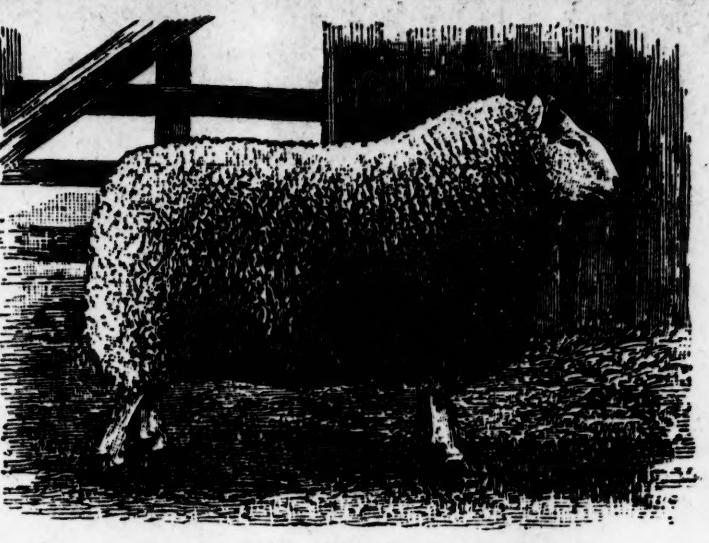
Indian corn is generally rather more than an average crop in western and central sections of the State. There are some complaints of shortage in these sections, but these are more than balanced by reports of unusually good crops. In the eastern and southeastern counties the crop is probably not quite up to the average, though it approaches more nearly to it than almost any crop. They are generally steady. Beets are steady. Peas are at 50 to 60 cents a bushel, and so are carrots at 50 cents, while good parsnips are \$1. Flat turnips in small supply at 60 cents a bushel and yellow firm at \$1.25 a barrel.

Onions are easier at \$1.65 a barrel for natural red or yellow, \$2 to \$3.50 for white, and \$1.374 per crate for Spanish. Lettuce are 40 cents a dozen bunches and chives from 75 cents to \$1. Radishes steady at 40 cents a box. Hothouse onions \$4 a box. Few pickling cucumbers and at all prices as to size, \$3 to \$6 per thousand. Tomatoes are very scarce and sell at 75 cents to \$1 a box, with green ones at 40 to 50 cents. Peppers steady at 60 to 85 cents a bushel and egg plant 75 cents to \$1 a box. Celery in good supply and fair demand at 50 cents a dozen. Squash a little easier at 60 cents a dozen. Squash for summer, 75 cents to \$1 a barrel for Marrow, \$1 to \$1.25 for Turban, Bay State or Hubbard.

Cabbages are in good supply at 60 to 75 cents a barrel, and native cauliflower plenty at 60 cents to \$1.50 a dozen as to size.

Lettuce varies in quality from 20 to 50 cents a box. Spinach plenty again at 15 to 20 cents a box, and parley abundant at the same price.

String beans in moderate supply but high demand at \$1.25 a bushel for wax and \$1.25 to \$1.50 for green. Shell beans scarce at \$1.75 to \$2 a box. Lima beans \$2 to \$2.25 for large, and \$2 for small or Sioux. Green corn growing scarce and a good



ENGLISH PRIZE CHEVIOT RAM.

The tubers are quite generally reported as being small. There are but few complaints of rot, and the quality appears to be excellent in most cases.

The prospect for root crops is not very flattering, though the recent rains have improved them, and with frequent rains in the future they may do better than is expected. Celery appears to be fairly good, though there are some complaints that the stalks are short and small. Other late market-garden crops have suffered from drought and will generally be below the normal.

Up to the time of the gale of Sept. 12, apples promised to give one of the largest crops ever gathered, but it appears to be a conservative statement to say that the gale shook off from one third to one half of them, except in very sheltered locations. These windfalls were not ripe at the time, and there has been no sale for them except for cider apples. Many report that there has been nothing done to utilize them, but the general plan seems to be to make them into cider for vinegar making. Those remaining on the trees should bring a better price than if all that were on the trees prior to the gale had come into the market and so make up for a portion of the loss. Baldwins appear to have suffered less than other varieties from the gale. The fruit is generally fair and free from blight, though rather small, owing to the drought and the large amount on the tree.

Pears were a fair crop, but the later varieties suffered much from the gale. Plums were a light crop. Peaches were well up to the average, but suffered in the gale. Grapes are generally a very good crop. Such returns as we have in regard to cranberries, which are few, would indicate that there is not much, if any, over half a crop.

Hog Butter in Washington.

A number of Washington capitalists have lately organized a butter or oleomargarine company, which is to be one of the largest concerns of its kind in the United States. The buildings, occupying a space of over 80 acres, are now in course of erection at Langston, D. C., within sight of the capitol. They will include a large refrigerating plant and an electric plant. Their ice plant will have a capacity of 100 tons per day. The plans of the factory are exact duplicates of the great Mansfield plant at Southall, England, which is one of the most successful butterine establishments in the world.

Oleomargarine or butterine is not of American origin; its earliest manufacture was in Europe about 25 years ago. It was shortly afterwards introduced into the United States. In the fiscal year ending June 30, 1899, there were 17 manufacturers engaged in producing oleomargarine in the United States. They were located as follows: one in the District of Columbia, four in Illinois, three in Indiana, two in Kansas, one in Missouri, one in New Jersey, two in Ohio and three in Rhode Island.

The export of both the raw materials of oleomargarine and the finished product has been increased steadily during the last ten years. All the European factories are now absolutely dependent upon the United States for most of their neutral lard, oleo oil, greases and cotton-seed oil, used largely in its manufacture.

—One of the difficult problems in practice mechanics is to make a "straight edge." How difficult it may be is shown by an incident which occurred in the shop of J. A. Brashear, the astronomical instrument maker. A customer asked Mr. Brashear what would be the price of a "perfect straight-edge of glass, three-quarters of an inch long." It was made "absolutely perfect," said Mr. Brashear, "but it could probably be made with a limit of error of one-thousandth of an inch." "How much would that cost?" "About \$40." "It turned out that the customer wanted the straight edge for a compass, and that an error of one sixtieth of an inch would have been insensible for his purpose.

—Perhaps no shade of Congress might have made could have been more fit than that of Franklin for the post of minister to France in 1776. He had represented the interests of the colonies in England for many years and was thoroughly familiar with European politics. He had been an editor for a long time and had not neglected to post himself on all topics of public interest with whom the thorough journals should be informed. He was a man of great tact and ingenuity, and an excellent orator. He had an excellent knowledge of French, Spanish and Italian, and a working acquaintance with other tongues.

—"Not only is it healthy to yawn," says a French physician, "but artificial yawning should be resorted to in cases of sore throat, buzzing of the ears, catarrh and like trouble." It is said to be as efficacious in its way as gargling the throat, with which process it should be combined.

THE ANGORA CAT.

A Super Edition, Beautifully Illustrated, Telling How to Select, Breed, Train and Manage Them.

In point of detail and correctness, the volume is the most complete book ever written on the subject. The Origin, How to Train, Care for Pictures and Breeding, Feeding, Grooming, Bathing, Washing and Grooming, Diseases, The Correct Type, Different Colors, besides interesting stories of how they eat, drink, play and sleep; in fact, everything about them. Over thirty-five half-tones and frontispieces, and a portrait of the author.

—"The Christian indeed is allowed to rejoice where other men rejoice; but he is also bound to rejoice where others cannot."—Loyd M. Vernon.

—There are seasons when to be still demands immeasurably higher strength than to act. Composure is often the highest result of power.

—"Know ye not that ye are the temples of God, and that such temples can be built only of the common stones that lie about us?"—James the Greater.

—"Opportunity for a Christian means responsibility." There are abundant opportunities for usefulness, but also few Christians realize or accept their responsibilities.

POULTRY.

Practical Poultry Points.
If the glory and profit of producing eggs in winter has departed, which some assert to be the case, because of the amount of cold storage eggs now put upon the market, and which certainly does prevent the scarcity which once prevailed for a few months in the winter, raising price to 60 cents per dozen at times, there is a chance for the poultry keeper to change his winter production to growing broiler chickens.

Do not understand us to say that there is not now a good profit in egg production in the winter at the prices which are paid for strictly fresh fancy lots, because we think there is. There is a wide difference between the price paid for nearby eggs from one who is known to have them not more than a week old, and to feed only good food to the hens, and the best selected Western eggs sent to our markets. There are always customers who will pay an extra price every week in the year to be sure they will have such eggs.

And there are those who will pay a fancy price for broiler chickens from Christmas to June. They need not weigh more than 1½ to two pounds each, but they must be well fattened and with a fair proportion of meat, not as we once heard a farmer describe broilers, as something that "when head and legs were removed were nothing but bones and pin feathers." He probably spoke of them as he knew them from his own growing, hatched late from mongrel birds and allowed to run at large until he feared they would eat their heads off, then killed and eaten because no one cared to buy them for market.

But to get good broilers one needs a good breed or cross breed that can by proper feeding be made a snug-built, blooky chicken at the weight we have named, with meat on breast and legs. The American class, Rocks or Wyandottes, of whatever color, and the Rhode Island Reds, make such chickens, and we have seen very good ones from a cross of the Brown or White Leghorn and Brahma.

To grow them one needs a warm room, not necessarily much warmer than is needed for winter laying hens, as they should be kept in a brooder or with good, motherly hens until they can endure the temperature of a house in which water never freezes, but there should be more care in having everything clean in the house. No lice or mites, no filth allowed to accumulate, and always clean sand on the floor and clean straw in the coop*. The hens also would need this to produce best results, but being more wary they might not die off like chickens if all was not quite up to standard.

For Christmas trade, hatching should begin in October, and it should be kept up until March, as often as the incubator can be filled, and hatch them out. They can be as well hatched under hens if one can get them broody at the right time, but we think the incubator is the most reliable in winter. It is always ready for work after the temperature has been brought to the right point, and it will not go off to leave the eggs half hatched if the lamp is filled and trimmed regularly.

We would begin with a stiff dough of about equal parts of cornmeal and wheat bran or fine middlings, which may be baked and crumbled for them after they are a week old, if thought best. By that time also they will begin to pick cracked corn or wheat. Then they need some fine but clean grit, and some meat, meal, also green food, or clover hay or clover meal. They need fresh water as often as they are fed, and it should be so arranged that they cannot get into it to soil it or to wet their feet. Skim milk will not take the place of water, and do not believe any one who says it will. It may be warmed and used to mix the mash for them, or it may be surdled as in making cottage cheese and mixed with the mash, in which case it is a partial substitute for meat. As they grow older reduce the bran and increase the corn and cornmeal. If a cheap rice can be obtained, clean but broken rice, it may be used, as may be stale bread, for one feed a day during the last two weeks of feeding. It gives special delicacy and fine flavor to the flesh.

They need to be liberally fed five or six times a day at first, and if kept in a brooder the heat needs to be carefully regulated, and starting at about 100° to be let run down gradually as they grow. The correct temperature is more easily found by watching them than given by a regular rule, as much may depend on number in a brooder, which should not exceed 50, and upon how they are fed. If they huddle under the hovers most of the time in the day they are probably too cool, while if they come out with mouths open the air is being kept too warm.

Encourage them to exercise by feeding them outside of the brooder, and never give more than they eat up clean, or if too much is given take it away at once. Do not throw the food in the sand, but feed in a dish or on a board and have it clean every time. We never found it any advantage to give boiled eggs, though the little ones eat them greedily, a d if they are infertile eggs tested out, perhaps they can be used for that purpose as well as for any. Certainly we would prefer to have the chickens eat them to eating them ourselves after the hen has set on them ten days, or they have been in the incubator that time.

Some of the fall hatched pullets may be saved to lay the next summer, and October chickens should begin to lay in March or April if pushed along, while March or April pullets should begin in November, and often will be the best stock to furnish winter eggs for sale or for hatching. They should be separated from those intended for broilers at two months old, and fed liberally, but not given so much fattening food, but more bran, meat and green food. Keep them growing but not fat.

One of the most important requisites for raising broiler chickens is to have fertile eggs from healthy and vigorous fowl. Do not take them from fowl weakened by disease or from those over fat, or those that have been given stimulating egg foods to induce heavy laying. Select eggs of normal size and shape, that have not been chilled, and have them as nearly fresh laid as possible. Such eggs are best obtained if the chicken grower keeps his own fowl and feeds them himself. We have no preference for eggs from old fowl over those of well-grown pullets, excepting that we would reject the first few eggs laid.

Poultry and Game.

The receipts of poultry are liberal, but largely from the West. This keeps up prices for fresh killed stock, nearly to last week's rates, and choice large chickens are 16 to 18 cents with fair to good at 12 to 15 cents. Extra choice fowl are 18 cents and common to good 10 to 11 cents. Spring ducks in moderate demand at 11 to 13 cents, young geese at 16 to 18 cents, and young turkeys at 18 to 20 cents. All are in moderate

supply. Pigeons are steady at \$1 to \$1.25 a dozen and squabs \$1.75 to \$2.25. Western live stock plenty, but chicken mostly only ordinary in quality. Some choice roasters or broilers of two pounds each bring 11½ to 12 cents, but most lots dull at 10 to 11 cents, and some go at 9 cents. Poults at same figures but have a better demand, and few below 10 cents. Old roosters at 7 to 7½ cents. Young turkeys run poor and sell hard at 8 to 10 cents, with ducks at 5 to 8 cents. Live poultry in only moderate demand with fowls at 10 cents, chickens at 9 to 10 cents, and old roosters at 5½ to 6 cents. Little demand for game, and chicken grous are dull at \$1.25 a pair, with snipe and plover \$2 to \$3.50 a dozen, but scarce.

HORTICULTURAL.

Orchard and Garden.

The Hatch Experiment Station at Amesbury planted last year 94 varieties of potato, all from seed of their own raising. Of each variety, with a few exceptions, 80 hills were planted one foot apart in drills three feet apart. The soil was a medium loam, in grass and clover for two years preceding, and had about five cords of barnyard manure per acre spread and plowed in. Then it had a fertilizer of 240 pounds each nitrate of soda and tankage, 400 pounds acid phosphate, 250 pounds high-grade sulphate of potash and 100 pounds dried blood per acre, scattered and mixed in the furrow. One-half were dug at early market maturity Aug. 1, and the rest when fully matured Aug. 22 and 23.

There were 30 varieties that gave 40 pounds or more from 40 hills, or as the rate of about 26 bushels per acre, and 36 varieties at maturity gave 35 pounds to 40 hills, or about 33 bushels per acre. The largest amounts at first digging, per acre, were 300 bushels—Early Roberts, 284 Early Kanza and 284 Carmen No. 1. Neither of these were among the 36 best at last digging. The largest amounts at last digging were Early Dawn and Early Andes 269 1/2 bushels, Triumph 460 7 and Fillbasket 416 2, with Washington and White Elephants each over 400 bushels.

Eleven varieties appeared in both lists, and we give yields at each digging for comparison as to the profits of digging early or waiting until fully matured. But No. 1 262 1/2 bushels, and 35½ at last digging. Dalton's 266 and 363 1/2, Beauty of Hebron and Early Rose 263 1/2 and 307 1/2. Early Rose 267 9 and 303 3, Early Rose 263 6 and 307 1/2, Horowitz 275 8 and 307, Howard 275 8 and 307, Montauk Wonder 260 6 and 347, Penn Manor 284 9 and 329 4. Prolific Rose 267 6 and 361 5, Vanguard 277 6 and 381 5, Vigor 294 2 and 329 4.

It will be noticed that many of these yielded over 100 bushels per acre more at last digging than at the first digging, also that the old Beauty of Hebron and Early Rose are found in both lists, thus ranking still among the most productive sorts, whether for early or late harvest.

Among varieties which have made good yields three or more years may be mentioned: Beauty of Hebron, Dalton's Seedling, Early Rose, Horowitz, Fillbasket, Prolific Rose, Restaurant, State of Maine, Thorburn, Vanguard and White Elephant.

The Practical Farmer asks its readers, "Should the English sparrow be destroyed? If so, how would you go about it?" Out of 100 replies all but one declare that they should be exterminated or destroyed as far as may be possible, and that one charges them with fouling and spoiling hay in the barn and driving away the song birds. The charges of eating small grain and the food put out for the chickens, their failure to eat insects, and their driving away or eating the eggs of the native insect-eating birds, as song sparrows, blue birds, swallows, martins, robins, bobolinks and others are alluded to by nearly all, as also their filthy habits around buildings. The methods of destroying them advised are baiting and shooting in the fall, feeding with poisoned grain in winter, catching in traps, also best done in winter, and destroying all nests and eggs during spring and summer. Michigan, Pennsylvania and Illinois have paid a bounty for their scalps, Pennsylvania having spent between \$75,000 and \$100,000 for that purpose in two years. Illinois pays two cents a head for them. But what is needed is concerted action by all the States, and active co-operation by all the farmers and in every city and village. This can accomplish much, and if they are not exterminated they can be so reduced in number as to be less troublesome. The editor of the above paper advises stocking our city parks with squirrels, which tear down the sparrows' nests as fast as they are built, but in the neighborhood of farms squirrels might prove nearly as much of a nuisance as the sparrows. By the way, we notice a report that our native birds have become more abundant this year where the forest tree caterpillars did so much damage



ENGLISH PUG.

last year. The birds gathered to destroy these and their eggs, and as the English sparrow did not care for that diet, they lived, thrived and brought up their families.

A writer in *American Gardening* tells how he grows asparagus which weighs 22 pounds per bunch of 26 stalks in two years from the seed, as was shown at the American Institute, May 9. He selects soil rather light but of good depth, and plows thoroughly. This is laid off in rows three to four feet apart, and he prefers four feet as giving plenty of room for cultivation. Through these rows he runs a two-horse plow several times to make a trench 14 to 18 inches deep. In this he uses a one-horse load of well-rotted stable manure to every 75 feet of drill. This is tramped down hard, and dirt is raked in from the side to cover it three or four inches deep. Then it is raked level and a furrow an inch deep is drawn along this.

The seed is soaked in tepid water for 24 hours or longer, to insure a quick start. When the plants are a foot high, they are thinned to one foot apart. He weeds the rows by hand for a space six inches each side of the plants, before running the cultivator through, as to go too close which might cover up the young plants; keeps the cultivator at work to maintain moisture in the soil for the young plants. The rows are covered with stable manure for the winter, and in the spring they are application of one pound of nitrate of soda to 100 feet of drill. In this way, from seed of the Palmetto variety sown in May, 1898, he had in May, 1900, just two years from the seed, a full crop of marketable asparagus, better than some get who set two year old roots and then wait two years more before cutting.

For other insects, such as the saw fly larvae, and all such as come at a later date than the caterpillar, an occasional spraying, vigorously applied, will prove an excellent preventive. When they have made their appearance, a sprinkling of powdered hellebore over the plants will often destroy or disperse them; but the plants should be well moistened before the hellebore is applied, so that it will remain. The red spider may be generally kept off by keeping the plants daily sprayed with water. When plants are once infested with this dreaded insect, the vines of sulphur will alone disperse or destroy them; his application will of course cause the foliage to drop off, but it is the only remedy we know to be efficacious. The red spider seldom attacks plants in the open air, but confines itself to the plants under glass.

For the rose bug hand picking must be resorted to, for, like the red spider, it is preying against hellebore, whale-oil soap, and all such applications.

Middle—This disease is generally caused by extremes of heat and cold, and by a long continuance of damp, cloudy weather. The best remedies are sulphur and soot; one of these should be applied the moment the disease makes its appearance. It is a good plan to previously sprinkle the plants with water, so that the substance applied will stick.—Ellwanger & Barry, Rochester, N.Y.

Domestic and Foreign Fruits.

With receipts last week of \$228 barrels of apples and an export trade of 3,544 barrels, prices are held firm on all first-class fruit, with a good local demand. Even the windfalls and inferior fruits brought in by farmers seem to be finding a ready market for immediate use. There is a good demand for choice, hand-picked Gravensteins at \$3.50 to \$4 a barrel. There are some from Nova Scotia not well colored, and rather ordinary, that bring \$2 to \$2.50. Dutches are \$1.50 to \$2, Twenty Ounce and Harvey \$1.50 to \$1.75, Hubbardston \$1.25 to \$1.75 and Pippins, Porters and Pound Sweet at \$1 to \$1.50. All must be first class to reach top quotations. Common sorts 20 to 25 cents a barrel. Pears in fair demand for choice, with ordinary dull for choice, \$1.50 to \$2.50. Seckels \$2.50 to \$3. Other sorts mostly 75 cents a barrel. Peaches in only moderate supply, but generally inferior in quality. Baskets of natives from 40 cents to \$1, according to variety, and bushel baskets Michigan at \$1 to \$2. Plums in moderate demand at 30 cents for Green Gage 25 to 30 cents for Damson and 20 to 25 cents for other good eating varieties, with common blue and green at 15 to 20 cents.

Grapes are in large supply, over 300,000 baskets and 10,000 carriers arriving last week. Pony baskets Delaware at 9 to 10 cents, Salem 7 to 10 cents, Niagara 7 to 9 cents and Marthas 6 cents. Concordes 11 to 12 cents for eight-pound and 5 to 7 cents for ponies. Cranberries steady at \$5 to \$5.50 a barrel for choice dark and \$4 to \$4.50 for medium, with boxes from \$1.25 to \$1.75.

Now many California oranges now at \$3.50 to \$4.50 for choice to fancy 200 to 215 cents. Some extra fancy held at \$5. A few Jamaican oranges coming in at \$5 to \$5.50 a barrel. Messina and Palermo lemons are for 30 cents \$3.50 for good, \$4 to \$4.25 for choice and \$4.75 to \$5 for fancy 200 cents usually 25 cents a box less on same grades. Sorrento and Mafra lemons, 300 cents, \$6 to \$7 a box. California grapes, plenty but steady prices. Tokay \$1.50 to \$1.75 a barrel. Messina and Palermo lemons are for 30 cents \$3.50 for good, \$4 to \$4.25 for choice and \$4.75 to \$5 for fancy 200 cents usually 25 cents a box less on same grades.

Protection—All of the Tea, Bengal, and most of the Bourbon classes need protection if left out during the winter in this and similar climates; indeed, all roses should be better for a light covering. This may be done by filling up with earth; or, better, by strewing leaves or straw lightly over the plants and securing them with evergreen branches; oftentimes the latter are in themselves sufficient.

Insects—These are bugbears which prevent many from cultivating the Queen of Flowers, but they offer little discouragement to loyal subjects, for generally it is only the careless and indolent who greatly suffer from these pests. If proper attention is paid to soil, planting, watering, etc., a few simple directions needed, you will not often be greatly troubled. The aphid is among the most annoying foes, and particularly infests plants in houses; healthy plants in the garden are but little liable to its attacks. There are numerous recipes for its destruction, and the cultivator can use those which are most convenient and effectual.

The vapor of tobacco smoke is not only very effective in destroying insects where it can be confined, as in greenhouses, but it is less injurious to delicate plants than either the smoke or the liquid. Hence, instead of fumigating greenhouses, it is customary now to strew the ground under the plants with tobacco stems, which, being moistened by the spraying, creates a vapor which is destructive to insect life. This method will probably supersede the old way of fumigating with tobacco smoke, which we have always found, up to the present time, the best mode where appliances can be had for confining the smoke; this, however, is not very convenient for use in dwelling houses, but we have other excellent remedies which are more practicable. Take four ounces of quassia chips and boil them 10 minutes in a gallon

of May 23 they had much less, and on the June 15 exhibit they had been able to save only seven little shriveled specimens. It was funny, especially as we had about a thousand plates of fresh, bright, sound fruit.

"American methods of packing and refrigeration have far outrivaled those of Europe. The Frenchmen found it impossible to believe that our fruit had not been treated or dipped or preserved in some way. We have apples still left over from last year's crop in first-class condition. It also surprised them that our fruit stood up so well for weeks after it had been taken out of cold storage. Up to the time I left Paris in July the United States had taken more than twice as many prizes for its fruit as had all the rest of the countries combined. America has practically swept the deck, and it will do our export trade an immense good. Up to the middle of September we had been awarded nearly 150 prizes for fruit.

"There is a great foreign demand, too, for good fruit. In France they do not attempt to store fruit to any extent. They market their apples during the crop season, and as soon as the crop is off the trees, that is the last that is seen of apples, by any except the very rich, until the next season. During September of last year, which month is perhaps the height of the season, quotations for Canadian Reinette, a favorite apple, were from \$1.20 to \$1.50 per bushel. By December apples were practically out of the market and the same apples were quoted wholesale at from 13 to 20 cents per apple, or \$20 to \$30 per hundred, while Céline, a fancy French apple, was quoted at 20 to 35 cents per apple, and during the winter many apples are sold at 50 cents apiece. The Frenchmen almost refused to believe that our apples exhibited last spring and summer were from the United States. They said this fruit comes from Australia. The season in the United States is about the same as in France, and they reasoned that, if the apple crop was over in their country, it must be likewise in America, not realizing the possibilities of proper packing and refrigeration. The presidents of the fruit department at Paris at first refused to allow the space demanded for the American fruit exhibit. He said it was impossible that fresh fruit of this character should be so exhibited out of season. He finally was convinced that the Americans would do what they promised, and the result has been that there has been a continuous American exhibit of apples and oranges since the opening of the fair. The other countries, including France, have at no time had a continuous exhibit. They have shown fruit only four or five days out of each two or three week periods.

The Frenchmen called us extravagant and wasteful in showing such quantities of fruit which we were unable to sell, but we have as a result numerous requests from dealers, not only in France, but in Germany, Denmark, Holland, Norway, Sweden and Australia, and even one from Hongkong, to know how they can get American apples and oranges. Not only this, but whereas we found no facilities in France for cold storing fruit, and had to arrange with a meat cold storage concern, fruit storage plants are being put in now in anticipation of coming trade. Never before have American apples been seen in the French market. Mr. Edwards, an American and the editor of the *Matin*, the paper which championed the Dreyfus cause, told me that never in his 30 years residence in Paris had he seen an American apple until our exhibit was opened. An important feature of our work, I consider, was in arranging for some reciprocal trade. If we are to supply the French market with fruit, we will have, to some extent, to overcome the opposition of native growers, and these Frenchmen are well organized to get all the legal legislation they desire. But the Frenchmen have no large quantities, and arrangements are now being made looking to their cold-storage shipments of this vegetable to the New York market; something which has not heretofore been done.

"The shipments of leather from Boston for the last week amounted in value to \$165,044, or \$1,000,000, similar week last year \$156,745. The total value of exports of leather from this port since Jan. 1 is of \$7,254,085, against \$6,776,515 in 1899.

"The total shipments of boots and shoes against 74,989 cases last week; corresponding period last year, 99,567. The total shipments that far in 1900 have been \$2,176,782 cases, against 3,500,976 cases in 1899.

"The shipments of live stock and dressed beef last week included 2,552 cattle, 1,000 sheep, 11,368 quarters of beef from Boston; 2,124 cattle, 267 sheep, 17,850 quarters of beef from New York; 1,759 cattle, 240 sheep, 2,355 quarters of beef from Baltimore; 805 cattle, 1,900 quarters of beef from Philadelphia; 2,261 cattle from Portland; 280 cattle from New Haven; a total of 11,107 cattle, 2,795 cattle, 28,754 quarters of beef from Liverpool; 172 cattle to Glasgow; 420 cattle to Liverpool; 124 cattle to Manchester; 16,207 sheep to Bristol; 270 cattle to Hull; 1,350 cattle to Avonmouth; 200 cattle to Southampton; 78 cattle, 257 sheep to Bermuda and West Indies.

"The Department of Agriculture has just received some interesting specimens of seedlings from Kentucky. They come from one particular tree, apparently an ordinary old persimmon, except that it produces seedless fruit, a triflce smaller than the seeds of persimmon.

"The Department of Agriculture has just received some interesting specimens of seedlings from Kentucky. They come from one particular tree, apparently an ordinary old persimmon, except that it produces seedless fruit, a triflce smaller than the seeds of persimmon."

"Answers to Questions on Poultry."

MASSACHUSETTS PLOUGHMAN
A WEEKLY JOURNAL OF AGRICULTURE
BOSTON, MASS., OCTOBER 13, 1900.

The Milky Way in Boston is not so very nebulous, with the bitter animosities and recriminations between wholesale and retailer.

In our esteemed contemporary of impeccable morals just a bit premature in his printing of poems "To the D. D. Summer" and "On Some D. and Leaves?"

The Lowell lectures are this year to be more distinctly Bostonian than ever. We're actually to have a double-headed course on "The Life and Works of Richard Wagner."

It seems that we are sending the sweat as well as the butter to our soldiers in the Philippines. Atkinson's pamphlets and Lowney's chocolates fought to average up well.

The Harvard football managers hope to put some new and invincible plays into effect this fall. Thus does the cause of the higher education advance with mighty strides.

The postage stamp funds will rage even more furiously than the President's health when they learn that one stamp at the Paris Exhibition commands \$10,000. Let's, in the interest of peace and quiet, keep the news a secret.

Results of investigations in the Chicago public schools show that small children on an average are not so bright as children physically larger, thus disproving the old adage, "Little head, little wit; big head, not a bit."

There are many ways of hospitably greeting the homesick maid who each year comes from Freshmen to our girls' colleges, but our mind none is prettier than the Wellesley way. On the first Sunday each new girl is given a card bearing a crisp sprig of violets and the text "God is Love."

Every man in the gallant Ninth Regiment looked perfectly sober when that body marched through Newspaper row and furnished the mayor at City Hall on Thursday. There was not a trace of potheen on any countenance. But how much alike a uniform makes the faces of all soldiers look.

The Cubans remember their manners after they get back from being entertained. They have just sent to their hostess, the city of Cambridge, a charming little note of thanks for courtesies extended during the summer. There's a suggestion here which may careless-mannered Americans would do well to note.

The Connecticut farmers whose cows have been indulging in older apples are said to be considering the advisability of appealing to the W. C. T. U. for pledges and relief. Wouldn't it be a better plan, and all in the family, to send the sparsome helpers right up to that new dispensary hospital we have established in Bedford, and named in honor of Frances Willard?

A Boston family, consisting of a very old lady, her son and his wife, owning a summer home near Marblehead, will remain there during the coming winter because their pet dog is in such feeble health that he cannot stand the fatigue of a journey to town. When the son proposed to chloroform the dog the old lady said: "You might do that to me. I am old, and have outlived my usefulness." Mr. Angell should send her a medal at once.

After a long and profound study of philosophy and religion, Lillian Russell announces that she is an out-and-out atheist. She has noticed that when she has headaches she is able to get rid of them by concentrating her mind upon the proposition that she has no headaches and by taking bromo salicylic and smelling salts. It is most extraordinary that the beautiful Lillian should come out in advocacy of the theory of the superiority of mind over matter.

How horrid it must be to spend the warm weather in London! Here is a sad tale of an American lady, who, wishing to purchase a fan, was directed to inquire for the same at a fruiterer and florist's shop by an unlikely place, she thought, but she nevertheless did as she was bid, with the result that the clerk brought her a fern in a pot. Only by saying "ah" could this warm lady get what she wanted. And then she had to go to an ironmonger's for it!

Yes, yes, critical friends. It's ambitious to the extent of being presumptuous—perhaps—for a light-comedy actor to essay the greatest role the stage has ever known, but who is going to give the rising generation proof positive that Shakespeare was meant to be noted as well as read if our young men do not occasionally see visions and then try to live them? For our part we thought Mr. Sothern's work a thing full of promise for the future, and we give him our most sincere "Thank you!"

Those fortunate folk who have just been enjoying the glories of the apple-laden orchards far up in our northern hills must read with the keenest delight of the good work of fruit distribution now being conducted here in Boston for the benefit of the city poor. The harvests have seldom been more plenteous than this year, and the farmers never more generously inclined. Many of those who have been asked simply for apples are daily, out of the fulness of their hearts, sending onions, quashes, potatoes, turnips and pears to the Lincoln wharf warehouse where the farmers' fruit offering is now being received.

When St. Paul said, "Be angry and sin not," he undeniably gave us an ingenious back-handed command to lose our temper once in a while. The persons who are so good that they are incapable of anger are not infrequently good for nothing. We're very glad to come down to the specific, that Bishop Potter and the New York clerks have this week obeyed their St. Paul to the length of being downright, out-and-out angry with the administration of the present corrupt police system in the metropolis. Chief Devoy and his lot need the scourges of the righteous as badly as did those who profaned the Temple in our Lord's time. And it rather looks just now as if they would get what they want.

The situation in China is but little more satisfactory now than at the time of our last issue. The hopes raised by the report of the removal from office and the degradation of Prince Tsuan, and the appointment of Earl Li and Prince Ching on the commission to negotiate terms of peace, are rather

dashed by the appointment of Yung Lee to the same commission, as he was generalissimo of the imperial troops, and is regarded as mainly responsible for the attack upon the legations. And while the apology made by the Emperor of China is about enough in terms, it is scarcely satisfactory to the Emperor of Germany, who insists upon having those guilty of the outrages brought to punishment. How far the good offices of the United States and Russia may go to lessening the demands made by Germany and France, and what other steps it may be necessary to take to bring China to show true evidence of repentance, and to give assurances of safety to foreigners in that country for the future, remains to be seen. While some are sanguine that the end is in sight, we fear that more trouble may yet arise.

A Western paper is quoted in the Chicago Drovers' Journal as saying that at a meeting of stockmen recently, they expressed the opinion that the price of cows when sold for beef was entirely too low. While nominally classed as "calfers," many of them served as good purpose as beef steers,

source which is virile, intellectual, rational or even gently moral. Almost invariably the preachers give "talks," which are giddy-go-round, sentimental or merely smart. The result is that the few men who do attend church get milk for babes and not meat for strong men; small wonder if they gradually cease to go at all. Thus far has Mr. Cooke gone up to the present writing. Whether he will present positive in the negative remedies for the situation as he sees it remains to be seen.

Meanwhile, however, it is good to note that there are optimists as well as pessimistic clergy in the Unitarian fold. The preacher who will next Sunday be installed as pastor of the Arlington-street Church said last week, in speaking of religious trends: "Year by year the unity of Christendom approaches. We shall have fewer churches, but finer and better ones. As trivial intellectual differences cease to separate men, we shall find the weak, infatuated, merely dissenting churches disappearing. People will come together more as once they did in the parish churches of the Puritan commonwealths, and as now they do

with grace and charm the home duties of old-bred women are popularly supposed to despise, said: "It is not possible today, any more than it was possible a hundred years ago, to annihilate the womanliness of our American girls by anything that can be done to them in education. I really cannot find that it makes much difference in their love of womanly ideals whether they are in a Western co-educational college, under the shadow of the oldest Eastern university, or alone in the estates of a woman's college by themselves. I have found everywhere womanly girls, keen in their ambitions for usefulness, and tender-hearted in their desire to be good comrades of the American men with whom they expect to live their lives." Expect to live their lives—the words must come with the shock of a new truth to the paragraphs who proclaim that the college-bred girl persistently ignores her "manifest destiny!"

In whom shall the mother of the land put their trust? Should they, believing Mrs. Palmer's statement that the womanliness of a pure girl lives on spite of Latin lore continue to send their daughters to the colleges where they wish to be, or should they keep them by the fireside and teach them

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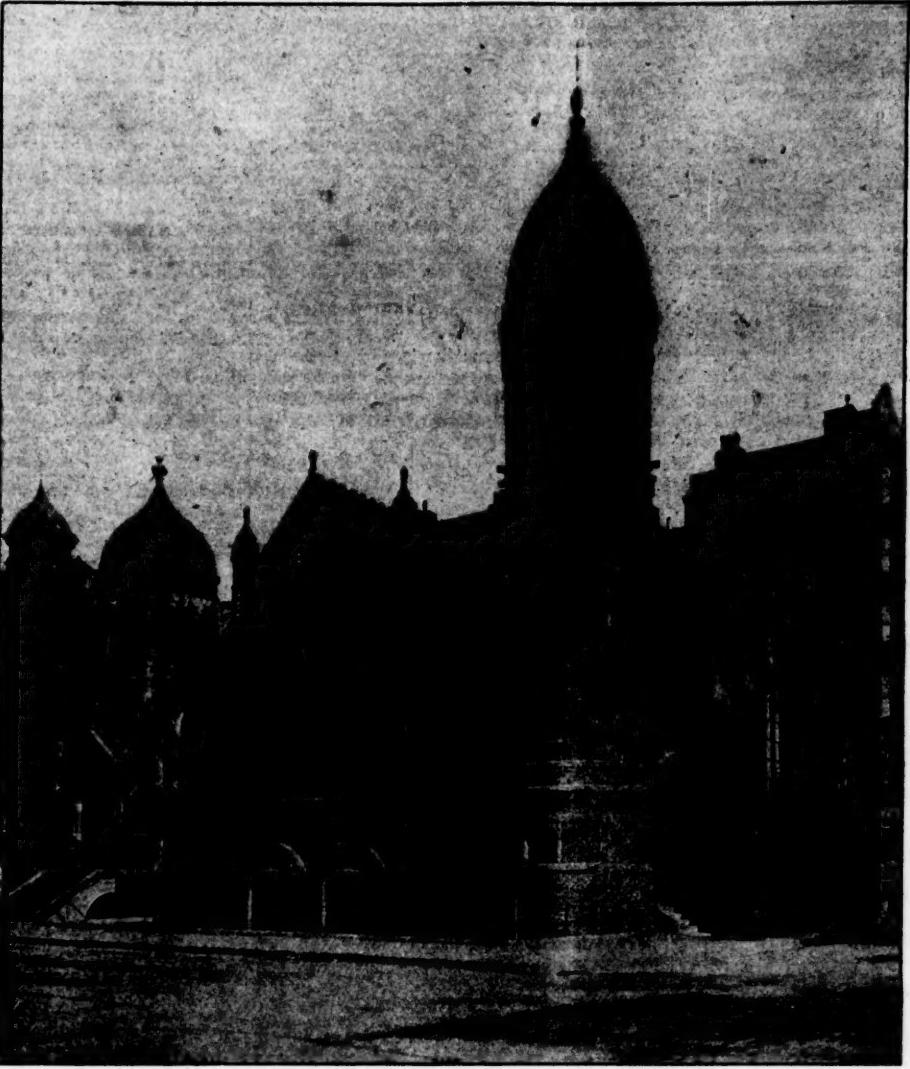
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SOUTH CONGREGATIONAL CHURCH, EXETER STREET.

and when well fattened would cut up as well on the block as the steer. If this is true, and we see no reason to doubt it, it accords with what has been said many times in our dairy notes, that farmers who, find themselves short of forage this fall, and have cows that they think are so old or give so little milk that it is doubtful if it would be profitable to buy feed for them, should fatten and kill them. Ever since the large packing houses have been supplying our markets with dressed beef, they have been trying to educate the people to believe that sow beef was not fit to eat, and the marketmen have been ready to assert that they never handled anything but steer beef. Yet we believe that no small part of what is sold as "light steer beef" is really cow beef, and none of the pork for that. We would prefer beef from a well-fattened cow to that from a thin steer, and we have tried both.

The Supreme Judicial Court of Massachusetts has recently decided that a sleeping-car company is not responsible for the loss of a passenger's traveling bag under the following circumstances: The plaintiff was a passenger over the Boston & Albany Railroad on a train leaving Albany at 3 P. M. and arriving in Boston at 9 P. M. The porter of a sleeping car placed his bag in a compartment secured by the passenger, who took something out of the bag half an hour after the train left Albany and then went into the smoking compartment, where he remained until the train had almost reached Boston, when he returned to his section only to find that the bag had disappeared. The train had made but three stops in the interval, and the porter testified that no one had left the sleeping car with a bag at any of these three stations. Mr. Justice Lithgow writes the opinion of the court, holding that the mere loss of the bag was not evidence of negligence on the part of the sleeping-car company, and that the bag was not in its sole custody, but was really in the custody and under the control of the passenger.

"Neither a railroad company," says the learned judge, "is a steamboat company, a sleeping-car company nor a palace car company owing to a passenger in regard to baggage the duty imposed by law on carriers or innkeepers, where the passenger keeps the baggage in his own custody and control." He notes that in New York a steamboat is regarded as a floating inn, but believes this view is peculiar to that State.

Two Views of the Church.

Through all the ages self-examination has been held to be an office generally necessary to salvation. Where there is inattention in matters spiritual there is always life. It is only when apathy and sluggish self-satisfaction settle upon a soul or a set of souls that we fear the approach of dulling disease, of disintegration and of death. An altogether hopeful sign, therefore, must we conceive to be such a startling arraignment of the weaknesses of Protestantism as that which the Rev. George Willis Cooke has recently presented. Mr. Cooke is a Unitarian clergyman, but he is now no longer preaching, we believe; he is listening, observing and drawing deductions.

What Mr. Cooke sees as he studies the religious situation in the various Protestant churches of New England strikes one at first blush as a rather gloomy prospect. The churches, he tells us, are failures so far as the men are concerned. Sermons are written to a large extent for the purpose of interesting women and young people, with the result that one can rarely hear a dis-

tinguishable sermon upon a soul and in the annual opening of the girl's college is a time fraught with soul-harrowing anxieties. Papers particularly devoted to "the cultivation of the eternal womanly" are wont at this time to indulge most generously in complaints against the "man-made college course."

Always the ground is taken that "the college-going girl is struggling against her obvious destiny as a wife and mother, a boy must necessarily tend to educate a girl to fine sewing and crochet work, cooking and the care of children." The function of the woman is clearly quite different from that of the man. Were it not wisdom then to train the girl in household duties just as it is to train the man for his profession?

What the defenders of the cooking school idea fail to grasp is that for the girl as for the man college going should mean more preparation for life. Cardinal Newman said it when he asserted that a university training is nothing but "the great ordinary means to a great but ordinary end . . . the making of good members of society."

President Eliot has said that there should be a "real essential wise difference" in the education of the two sexes, and Ruskin long ago told us the same thing. But Harvard's president and Wellesley's ex-president are agreed that as yet no one has discovered what this difference should be. And they are further agreed that the means of discovery lie for the present in an absolute freedom of studies for both men and women. When the vexed problem of advancing women and young men has been solved, the girl's college will make possible for budding womanhood just that self-realization which is now the great university's best gift to its loyal sons. Till then let us have even the man-made college, rather than the coddling cooking school kind of curriculum.

The Apple Orchard.

The horticulturist of the Experiment Station at Columbia, Mo., sends out Bulletin No. 49 under the above title and it contains much that is as applicable in other States as in the one where it was written, so that we propose to give our readers the benefit of it in a more condensed form.

They have planted every year since 1894 several hundred trees in the horticultural grounds, also have orchards planted in 1872 and 1878, and other orchards planted for various purposes during the past 30 years, also three orchards of bearing age on the college farm, and have had an opportunity of studying other large commercial orchards in the State, so that they have had a good chance to make investigations and comparisons of methods of cultivation, spraying, pruning, etc.

The orchard planted in 1894 is on a heavy clay loam, sloping enough to give good surface drainage, although it holds water too well to be a good orchard soil. It has been in bear crops for years, but kept in fertile condition by manuring. One-half was subsoiled as deep as a pair of horses could draw the subsoil in the furrow behind the plow, while the other half was plowed and not subsoiled. No difference has been seen in the growth of the trees or in the condition of the soil, excepting that it seemed looser for the first few months.

On land where timber has been cut off, they believe the orchard should be set the next spring, after the brush has been burned. Trees so set made as good a growth the first year as those on older, well-tilled soil.

The tree roots go down deeply among the decaying stumps and roots.

They have large areas of land there well adapted to orchard, excepting that there is a hard pan near the surface. There is a gravel below it in which the roots strike when they can get through the hard pan. In some cases the pan has been broken by exploding a small charge of dynamite in the tree holes, but this is too expensive for general use. Deep plowing and growing clover has filled such soil for the tree roots, and in some cases it has been the cheapest method of subsoiling, as its deep growing

roots bore through the hard pan and make it porous. Cow peas may be used instead of clover in some cases where clover does not grow well. They help to make the soil more retentive of moisture, which softens it.

In comparing orchards which had been differently managed, they found that the greatest growth had been made by those which had been cultivated most, and that cultivated trees make a more uniform growth than those not cultivated. This is more important than the amount of growth. The more the trees are cultivated, the less they are affected by drought. The drought of the fall affect the growth of the next year, and in many cases uncultivated trees will live through such droughts only to die the next season. A tree which makes excessive growth in the spring may suffer more from lack of water in the fall than one which has less vigor and leaf growth.

If conditions are favorable for healthy growth through the entire season, it is better to cease cultivating early enough to allow the wood to ripen, say about Aug. 1, but if there is drought in late summer or fall, it is best to keep the land cultivated to preserve the moisture in it and allow the wood to fully mature its tissues. If at such a time they are carrying a heavy crop of fruit, they may need cultivation until the crop is gathered. This enables them to mature the fruit without loss of vitality.

The more abundant the growth in early summer, the later the orchard should be cultivated, if the weather is dry and hot, or the trees loaded with fruit. The growth will not be properly matured if this is not done.

A dry, hot August makes it desirable to continue frequent cultivation to prevent a check to growth and a premature falling of the leaf, as it may be followed by warm, rainy weather which will start the dormant trees into a springlike growth, which will not harden up before winter.

But it is not desirable to keep the ground bare in the orchard all the time. The bare soil lacks humus and some of its fertility is lost; it becomes hard like a road bed, and water does not penetrate it; it loses its moisture quickly in a dry time and becomes hard and lumpy. To prevent this some kind of vegetable matter should frequently be plowed under.

The best crops for this purpose are such as can be given clean cultivation with the tools, or such as may be sown after the cultivation ceases in the autumn and may be plowed under in the spring. While the trees are young, crops may be grown which will in part at least pay for the cultivation of the orchard. Corn may be grown where the land is rich enough until the trees are of a bearing age. But corn growing can be overdone. It may take too much of the fertility and moisture from the soil, or it may be planted too close to the trees so as to prevent a proper spread of the lower limbs. Some plant two rows of soy beans or cowpeas between the corn and trees, and turn in hogs to eat off these crops in the autumn. They make with the corn a balanced ration for the hogs and the low-growing plants give chance for the trees to develop.

Where there is a market for them small fruits may be profitably grown in an orchard, and so may garden vegetables which require thorough cultivation, and leave some vegetation in the soil. Cow peas or soy beans sown in June are among the best orchard crops, as they fertilize the soil and help it to resist drought. They are best sown in rows, but if sown broadcast space should be left for the cultivation of the trees. They may be sown for hay or pastured down with hogs, but it is best not to plow down the sabbath under spring, as they serve to prevent washing of the soil.

On hillside clover is an excellent crop to prevent washing, and it should be sown in strips running across the hillside between the trees, but the land should be kept rich enough to prevent the clover from being crowded out by grass and weeds. Rye sown between the rows to be plowed under in the spring also makes a good cover crop for winter, prevents washing and adds something to the fertility of the soil. Buckwheat has been tried in the station orchards for this purpose, but did not prove satisfactory. After it was plowed under in the spring the soil remained lumpy, baked and washed badly and did not withstand drought.

The tools that have proved useful in the orchard are the cutaway or spreading harrow to turn under light cover crops in the spring and pulverize the soil after rains, or when prolonged wet weather has given weeds a good growth; the Asnes harrow, to break light crusts after a rain and to

smooth and level the soil after other implements have pulverized it, and spike tooth harrows to keep the soil stirred and fine. The Broad weeder might work well in a light soil, but does not on so heavy a soil as that at the station. A cultivator is needed where crops are planted in narrow rows between the trees. It should have coarse teeth or shovels to use when the ground is hard after a rain, and spike teeth to use when the ground is light and fine. Other tools may be convenient in some localities.

The peach needs about the same cultivation as the apple. Cultivation may cease early if there are abundant rains in August and September, but if those months are dry and hot, or there are heavy crops of fruit on them, they have found best results from cultivating until the crop was off. Japanese plums should be treated about the same as peaches, but the American plums do fairly well in clover or even in blue grass, but usually do better under clean culture. Dwarf pears need thorough cultivation, but standard pears and cherries usually do best if cultivated until they are of a bearing age, and then sown to clover.

Fractional Sheep Husbandry.

An excellent thing for the sheep from this time on will be to add to the salt one-fourth as much of an even mixture of ground ginger, gentian and sulphate of iron, and give this once a week. This is to some extent an antidote against intestinal worms, and is, as well, an excellent stimulant for the ewes.

It will pay to give the lambs, and ewes as well, a little supply of grain food. It won't be lost. It will tell all through the winter. For as the condition is all the better at the start, so it will be all through the season for feeding. On the other hand, what may be lost now by neglect or parsimony will not be regained later.

The fall of the year has always been justly considered as the special time when diseases begin to invade the flock. The disease begins and after ripeness always comes rapid decay. The decaying matter washed from the soil pollutes the drainage and pollutes the water. This pollution causes diseases of many kinds which greatly trouble the shepherd.



THE TROTTING SIRE POTENTIAL, BY PRODIGAL, 2 16, DAM, HELEN T., SISTER OF ARION 2 073-4.

THE HORSE.

Barre (Mass.) Cattle Show.

The annual Barre Cattle Show was held Thursday and Friday of last week, and following the time honored custom "Old Sport" of course had to attend, as did his father before him for years. Now it is easy to get to Barre, but very hard to get back. The Boston & Maine Railroad has for years humbugged the public by selling excursion tickets and naming a "Sport," and the only one, '00, and his son '01, are just as bad racetrack names. Consequently the deer, delightful, dished up has to take it or not, except the alternative of staying over night at Barre. But everybody has a good time at Barre for all that.

Marshall Gagnier and the other states have the wants of their guests at heart, and attend to them in the best possible manner. Here one meets old acquaintances and friends of years gone by, men who on New Braintree hills raise noble pairs of horses, and breed many good trotters and pacers,—such men as Luther Cravford, who follows out his own ideas on breeding and sets good progeny at that; also Newell Fackard of Oakhurst, whose horses are the cynosure of all eyes. An old acquaintance who should not be forgotten is Joe Weeks, the veteran landlord. Now Joe loves a horse as he does his life, and he exhibited a pair at Barre that not only captured a premium, but were the observed of all observers.

Many years ago Joe Weeks used to keep the Ant's House in Palmer, a favorite resort with most everybody, especially the Bostonians. Before Joe Weeks was made the house was known as the old fashioned "Board" Shaw, and when Joe took hold of it he kept up its former reputation. It used to be very pleasant evening after the races at Palmer to sit in the old bar-room and listen to the tales of the horsemen and the drivers, the jokes and stories of Ethan Robinson, who drove St. Elmo, and of Charlie Failes, driver of Bonnie Doon, to say nothing of Bill Sherman, "Ard" and Jo A Carpenter. All those were times never to be forgotten, and meeting Joe Weeks today brought back all the old memories.

But to the Barre Fair. Friday was the day devoted to horses, and there was trotting and racing in both the forenoon and afternoon.

The 2:40 pace was won by the old Milner, owned by Dr. George McLean of Worcester. This colt has been very successful in the different entries shown this season, having won first money in most of his races.

In the free for all one of the contestants was Helen E., the beautiful pacer mare that has won many a hotly contested race down the circuit.

She was brought up from Headville to Barre by a drunken grocer, and was two days on the road arriving in Barre just the day of the race. Al-

though a mare of great speed, she showed apparent weakness, and was easily beaten, but her driver, Tom Blanchard, drove her to the best of his ability. It seemed a pity to run the risk of spoiling a good mare for a paltry sum.

Peter Turner, who cut the grass for the grocer, being a man of faith but very well driven by Nelson Jones. The mare Minnie Bright easily captured first honors. Robie Hoot won the 2:57 1/2 in three straight, with Valentine second in each heat, and Della J. proved the fastest of the three horses that turned for the word in the 2:19 class, she winning it in straight heats.

Mr. Watson of Nashua presided in the judges' stand and gave good satisfaction. His voice was clear as a bell, and his announcements could be heard the length and breadth of the grand stand.

The races were brought to a close at 5:30, and below are the summaries:

HORSE OWNERS SHOULD USE GOMBAULTS

hair, a distance of 14 miles, and at that place caught the electric for Worcester. To ride was a pleasant on, and many interesting stories were told by "Old Sport" and the others. Worcester was reached by 10:30 and all who came by the four-in-hand had a good time.

Secretary Julius Knight is making every preparation to have the Driving Club's meeting at Greenfield next week a success. A large list of entries have been received and now all needed is good weather in order to make the meeting successful.

All the horsemen hereabouts are praising the performance of Benton M. This grand old horse, although handicapped at the Brockton Fair, stayed up for three heats and was timed 2:09 1/2 by reversal in the grand stand. The history of Benton M. would fill a book, and it goes without saying if the horse had had a fair show he would have done much better. Be that as it may, the people hereabouts will always have a kind feeling toward old Benton M.

Double team racing is again coming into fashion, and persons offered for double teams, trot or pace, at the Brockton Fair attracted the famous double team of pacer, Uncle Tom and Major Wonder, owned by E. B. Pierce of this city. This event attracted many from Worcester and no one who went to see them home came disappointed. Mercury Wilkes with Belle Colley, S. E. (2:09 1/2) and Randolph K. and Gagnier and Dan Westland, were all expected to do well. Uncle Tom and Major, however, had the sturdy arms and nerves of Frank Winch piloted the Worcester team to victory. Everybody congratulated Mr. Pierce upon the victory, and the Heart of the Commonwealth team, or "I" as it is called, had a fair show.

The train was a regular. I own I always thought pretty well of Charley Herr, but after his performance on that memorable afternoon, I think he is the greatest race horse that ever wore shoes. Ethan had the narrowest squeak of his life, and had not Charley Herr knowned the home stretch in the third heat he follows on the dalesides would have had something to write about.

The Action Pitch Club held lengthy sessions on the track each day. There was a slight reorganization of the club on Tuesday and a set of new officers now hold forth. Fred Horton was elected president, Jessie Brown vice president, Charlie Hall treasurer, and Billy Sheldon secretary. The old dilated jawed one little, and on consideration of a Thanksgiving stoppage at Worcester, or the accommodation of the local people, I hear the Action Pitch Club will instruct the secretary to draft a set of congratulatory messages to be sent to the officials of the road. On Thanksgiving, after the train left the city and had progressed a few miles, a stop was made. Then the train was back to the city. The conductor said that a car had been left on; I understand Grantly was the cause.

It is little excitement at Narragansett Park on Wednesday afternoon. William E. Draper's mare, Alinta, (race record, 2:11 1/2), seems to beat her mark. The trial was conducted by a side bet between Mr. Draper and another horseman. The latter bet she would come in under 2:09 1/2, and the former in 2:10 1/2. The second was 2:11 1/2. The first trip was not made. It was the intention to have the third heat on Friday, but it did not take place, so Mr. Draper must have lost. H. T. Tilghman drove the mare which started Saturday at Riverpoint in the free for all, getting fourth money. The race at Riverpoint was held in conjunction with the Kent County fair, and I enclose a summary without comment. Figures placed correctly will be figured right.

This city will be in line in the Grand Circuit next year. The track has been covered for the winter, and, of course, all racing is out of the question. The track is in excellent condition, and the horses and drivers are in top form.

Edgar M., b m (Lobiano). 1 3 1 1
Alice Bruce, b m (Searis). 2 3 4 2
Anne Knott, br m (Nichols). 4 6 4 2
Sadie Walker, br m (Andrews). 2 0 0 0
Time, 2:04 1/2, 2:27 1/2, 2:24 1/2

Same day—2:19 class, trot or pace. Purse, \$100.

Yours, "OLD SPORT."

[The record for pacing teams in a race is 2:17 1/2, made by Gagnier and Mercury Wilkes over the Brockton track last year.]

PROVIDENCE (R. I.) NOTES.

It was my pleasure to attend the four day meet given by the New England Horse Breeders Association at Headville, and I may say that there was some excellent racing sandwiched in with some poor. Of the latter kind I speak of the 2:10 pace and 2:16 trot on Wednesday. The former was about the rawest deal ever sprung on the unsuspecting public, and I must say that the judges dealt very leniently with the offenders. Just why it took the learned gentlemen in the stand three heats to see that there was a rancor on between the drivers of George and Gamby is a mystery. The summary for those three heats would excede-

the result of which is shown in the following summaries:

SUMMARIES.

Riverpoint, Kent County, R. I., Thursday, Sept. 27, 1900—2:35 class, trot or pace. Purse, \$200.

Benton Godard, b m (Krauer). 1 2 2 1
Baron Wood, b g (Fornaser). 2 2 2 1
Edgar M., b m (Lobiano). 1 3 1 1
Ortiz, br m (Bobson). 4 6 4 2
Happy Home Jr., b g (Walker). 2 0 0 0
Time, 2:22 1/2, 2:21, 2:21 1/2, 2:21 1/2

Same day—2:30 class, trot or pace. Purse, \$100.

Lady Hazel, br m (Gallia). 1 2 1 1
H. Gould, b m (McGrath). 1 2 1 1
Edgar M., b m (Lobiano). 1 3 1 1
Ortiz, br m (Bobson). 4 6 4 2
Happy Home Jr., b g (Walker). 2 0 0 0
Time, 2:22 1/2, 2:21, 2:21 1/2, 2:21 1/2

Same day—2:37 class, Purse, \$800.

Robin Hood (Davis). 1 1 1
Della Santos (Davis). 2 3 2
Jimmie Michael (Haynes). 2 3 2
Nellie D. (Drury). 4 4 4
Time, 2:21 1/2, 2:21, 2:21 1/2

Same day—2:37 class, Purse, \$800.

Venture (Chleberg). 1 1 1
Walter Leonard (Stevens). 3 3 3
Time, 2:21 1/2, 2:21 1/2

Same day—2:19 class, Purse, \$800.

Della J. (Stone). 1 1 1
Otto (Stevens). 3 3 3
Orion (Miller). 3 3 3
Time, 2:24 1/2, 2:21 1/2, 2:21 1/2

How to get home was the next problem. Finally A. B. Brunello, N. D. Dow, Dr. Foote, Jim Forrest and "Old Sport" chartered a four-in-hand and drove from Barre to North Brook-

line, a distance of 14 miles, and at that place caught the electric for Worcester. To ride was a pleasant on, and many interesting stories were told by "Old Sport" and the others. Worcester was reached by 10:30 and all who came by the four-in-hand had a good time.

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The train was a regular. I own I always thought pretty well of Charley Herr, but after his performance on that memorable afternoon, I think he is the greatest race horse that ever wore shoes. Ethan had the narrowest squeak of his life, and had not Charley Herr knowned the home stretch in the third heat he follows on the dalesides would have had something to write about.

The Action Pitch Club held lengthy sessions on the track each day. There was a slight reorganization of the club on Tuesday and a set of new officers now hold forth. Fred Horton was elected president, Jessie Brown vice president, Charlie Hall treasurer, and Billy Sheldon secretary. The old dilated jawed one little, and on consideration of a Thanksgiving stoppage at Worcester, or the accommodation of the local people, I hear the Action Pitch Club will instruct the secretary to draft a set of congratulatory messages to be sent to the officials of the road. On Thanksgiving, after the train left the city and had progressed a few miles, a stop was made. Then the train was back to the city. The conductor said that a car had been left on; I understand Grantly was the cause.

It is little excitement at Narragansett Park on Wednesday afternoon. William E. Draper's mare, Alinta, (race record, 2:11 1/2), seems to beat her mark. The trial was conducted by a side bet between Mr. Draper and another horseman. The latter bet she would come in under 2:09 1/2, and the former in 2:10 1/2. The second was 2:11 1/2. The first trip was not made. It was the intention to have the third heat on Friday, but it did not take place, so Mr. Draper must have lost. H. T. Tilghman drove the mare which started Saturday at Riverpoint in the free for all, getting fourth money. The race at Riverpoint was held in conjunction with the Kent County fair, and I enclose a summary without comment. Figures placed correctly will be figured right.

This city will be in line in the Grand Circuit next year. The track has been covered for the winter, and, of course, all racing is out of the question. The track is in excellent condition, and the horses and drivers are in top form.

Edgar M., b m (Lobiano). 1 3 1 1
Alice Bruce, b m (Searis). 2 3 4 2
Anne Knott, br m (Nichols). 4 6 4 2
Sadie Walker, br m (Andrews). 2 0 0 0
Time, 2:04 1/2, 2:27 1/2, 2:24 1/2

Same day—2:19 class, trot or pace. Purse, \$100.

Yours, "OLD SPORT."

[The record for pacing teams in a race is 2:17 1/2, made by Gagnier and Mercury Wilkes over the Brockton track last year.]

PROVIDENCE (R. I.) NOTES.

It was my pleasure to attend the four day meet given by the New England Horse Breeders Association at Headville, and I may say that there was some excellent racing sandwiched in with some poor. Of the latter kind I speak of the 2:10 pace and 2:16 trot on Wednesday. The former was about the rawest deal ever sprung on the unsuspecting public, and I must say that the judges dealt very leniently with the offenders. Just why it took the learned gentlemen in the stand three heats to see that there was a rancor on between the drivers of George and Gamby is a mystery. The summary for those three heats would excede-

the result of which is shown in the following summaries:

SUMMARIES.

Riverpoint, Kent County, R. I., Thursday, Sept. 27, 1900—2:35 class, trot or pace. Purse, \$200.

Benton Godard, b m (Krauer). 1 2 2 1
Baron Wood, b g (Fornaser). 2 2 2 1
Edgar M., b m (Lobiano). 1 3 1 1
Ortiz, br m (Bobson). 4 6 4 2
Happy Home Jr., b g (Walker). 2 0 0 0
Time, 2:22 1/2, 2:21, 2:21 1/2, 2:21 1/2

Same day—2:30 class, trot or pace. Purse, \$100.

Lady Hazel, br m (Gallia). 1 2 1 1
H. Gould, b m (McGrath). 1 2 1 1
Edgar M., b m (Lobiano). 1 3 1 1
Ortiz, br m (Bobson). 4 6 4 2
Happy Home Jr., b g (Walker). 2 0 0 0
Time, 2:22 1/2, 2:21, 2:21 1/2, 2:21 1/2

Same day—2:37 class, Purse, \$800.

Robin Hood (Davis). 1 1 1
Della Santos (Davis). 2 3 2
Jimmie Michael (Haynes). 2 3 2
Nellie D. (Drury). 4 4 4
Time, 2:21 1/2, 2:21, 2:21 1/2

Same day—2:19 class, Purse, \$800.

Della J. (Stone). 1 1 1
Otto (Stevens). 3 3 3
Orion (Miller). 3 3 3
Time, 2:24 1/2, 2:21 1/2, 2:21 1/2

How to get home was the next problem. Finally A. B. Brunello, N. D. Dow, Dr. Foote, Jim Forrest and "Old Sport" chartered a four-in-hand and drove from Barre to North Brook-

line, a distance of 14 miles, and at that place caught the electric for Worcester. To ride was a pleasant on, and many interesting stories were told by "Old Sport" and the others. Worcester was reached by 10:30 and all who came by the four-in-hand had a good time.

Secretary Julius Knight is making every preparation to have the Driving Club's meeting at Greenfield next week a success. A large list of entries have been received and now all needed is good weather in order to make the meeting successful.

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